

# Automatic Routing System with Variable Width Interconnect

## Abstract

A system automatically routes interconnect of an integrated circuit design using variable width interconnect lines. For example, a first automatically routed interconnect may have a different width from a second automatically routed interconnect. The system will vary the width of the interconnect lines based on certain factors or criteria. These factors include current or power handling, reliability, electromigration, voltage drops, self-heating, optical proximity effects, or other factors, or combinations of these factors. The system may use a gridded or a gridless (or shape-based) approach.